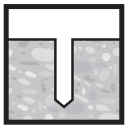
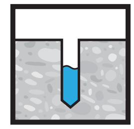
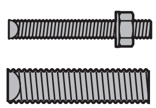
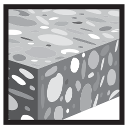
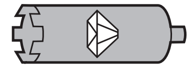
				d_0	h_{ef}	
1		HIT-Z		7/16"...7/8" 10 … 22 mm	2 3/8"...8 1/2" 60 … 220 mm	16
2		HIT-Z		7/16"...7/8" 10 … 22 mm	2 3/8"...8 1/2" 60 … 220 mm	18
3		HIT-Z HIT-V HAS HIS-N Rebar		1/2"...1 1/8" 12 … 32 mm	2 3/8"...15 3/4" 60 … 400 mm	20
4		HIT-V HAS HIS-N Rebar		7/16"...1 1/2" 10 … 40 mm	2 3/8"...25" 60 … 640 mm	21

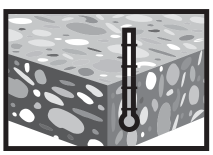
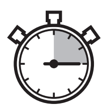
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en	Dry concrete	Water saturated concrete	Waterfilled borehole in concrete
fr	Béton sec	Béton saturé d'eau	Trou dans le béton rempli d’eau
es	Hormigón seco	Hormigón saturado de agua	Taladro lleno de agua en hormigón
pt	Betão seco	Betão saturado de água	Furo em betão cheio de água

			
en	HIT-Z HIT-Z-R	Threaded rod Threaded sleeve	Rebar
fr	HIT-Z HIT-Z-R	Tige filetée Douille filetée	Armature métallique
es	HIT-Z HIT-Z-R	Varilla roscada Manguito roscado	Barras corrugadas para armado
pt	HIT-Z HIT-Z-R	Barra roscada Casquilho roscado	Ferros de armadura

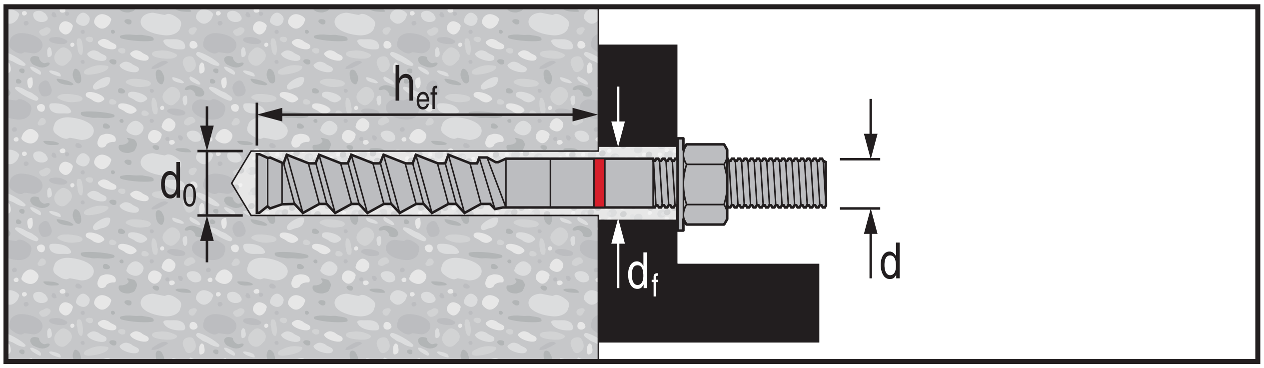
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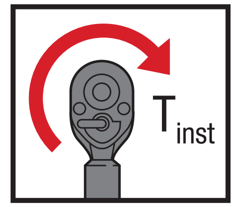
					
en	Uncracked concrete	Cracked concrete	Hammer drilling	Hollow drill bit	Diamond coring
fr	Béton non lézardé	Béton lézardé	Perçage avec percussion	Foret creux	Forage au diamant
es	Hormigón no fisurado	Hormigón fisurado	Taladro con percusión	Taladro con broca hueca y aspiración	Taladro con diamante
pt	Betão não fissurado	Betão fissurado	Perfurar de martelo	Broca de coroa oca	Perfurar com equipamento diamantado

		 t_{work}	 t_{cure}
en	Temperature of concrete	Working time	Curing time
fr	Température du béton	Temps de manipulation	Temps de durcissement
es	Temperatura del hormigón	Tiempo de ajuste	Tiempo de fraguado
pt	Temperatura do betão	Tempo de trabalho	Tempo de cura total

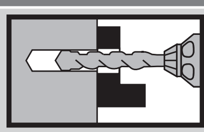
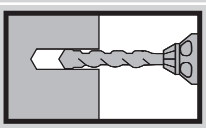
Printed: 31.01.2013 | Doc-Nr: PUB / 5113084 / 000 / 02

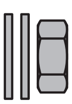
HIT-Z, -R





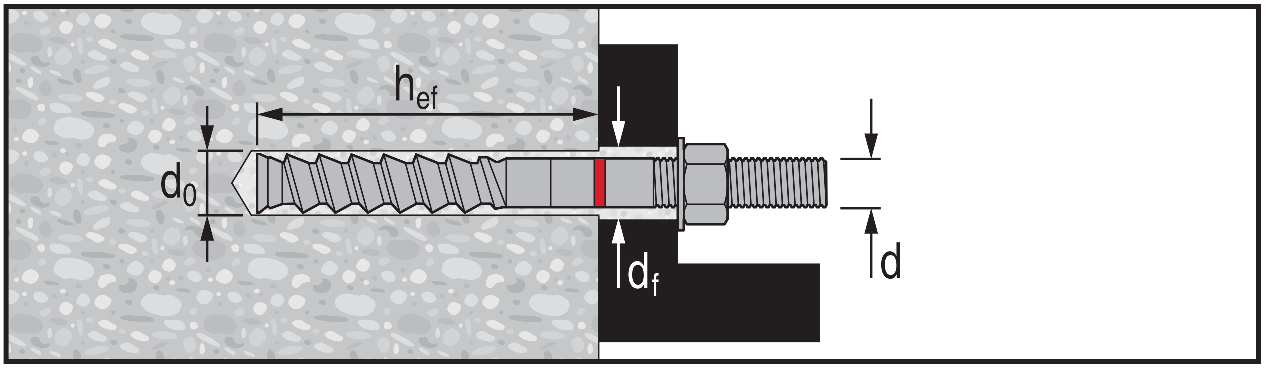
 Ø d [inch]	Ø d_0 [inch]	h_{ef} [inch]	T_{inst} [ft-lb]	T_{inst} [Nm]
3/8	7/16	2 3/8...4 1/2	15	20
1/2	9/16	2 3/4...6	30	40
5/8	3/4	3 3/4...7 1/2	60	80
3/4	7/8	4...8 1/2	110	150

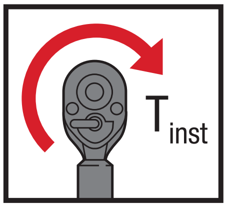
d_f [inch]	HIT-Z, -Z-R	3/8	1/2	5/8	3/4
d_{f1}		1/2	5/8	13/16*	15/16*
d_{f2}		7/16	9/16	11/16	13/16

* 

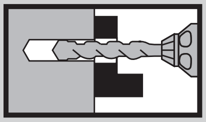
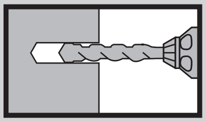
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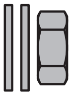
HIT-Z, -R





 Ø d [mm]	Ø d_0 [mm]	h_{ef} [mm]	T_{inst} [Nm]
M8	10	60…96	10
M10	12	60…120	25
M12	14	70**…144	40
M16	18	96…192	80
M20	22	100…220	150

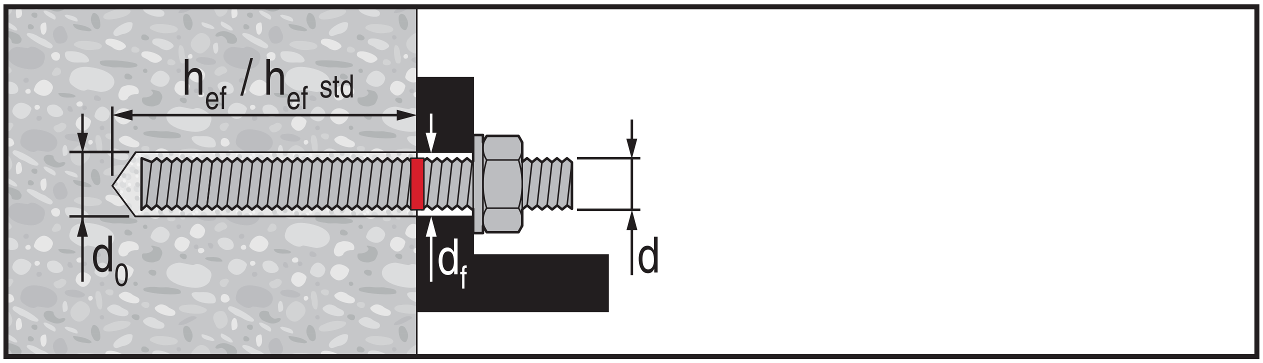
d_f [mm]	HIT-Z, -Z-R	M8	M10	M12	M16	M20
d_{f1}		11	14	16	20*	24*
d_{f2}		9	12	14	18	22

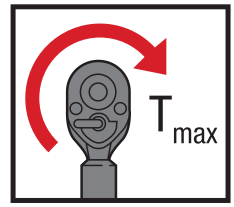
* 

** For ETA $h_{ef\ min}$ = 60 mm

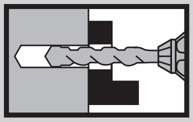
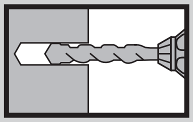
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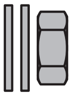
HAS





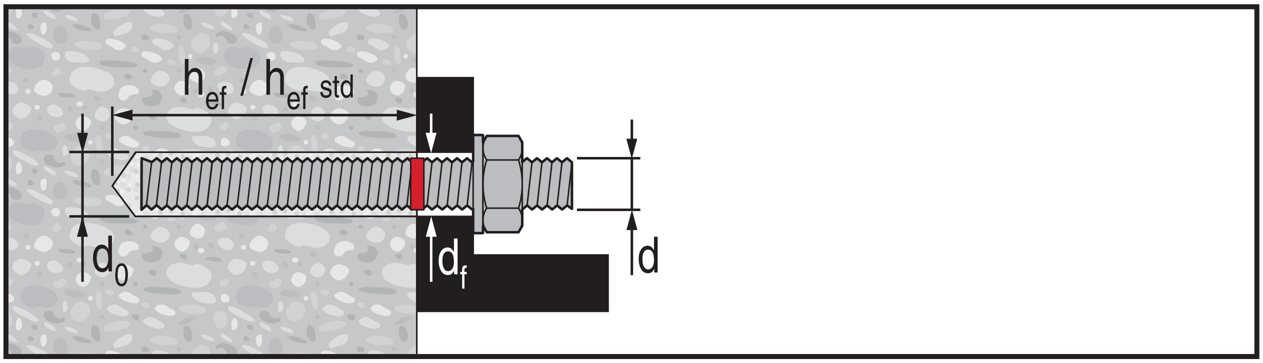
 Ø d [inch]	Ø d_0 [inch]	$h_{ef\ std}$ [inch]	h_{ef} [inch]	T_{max} [ft-lb]	T_{max} [Nm]
3/8	7/16	3 3/8	2 3/8 … 7 1/2	15	20
1/2	9/16	4 1/2	2 3/4 … 10	30	41
5/8	3/4	5 5/8	3 1/8 … 12 1/2	60	81
3/4	7/8	6 3/4	3 1/2 … 15	100	136
7/8	1	7 7/8	3 1/2 … 17 1/2	125	169
1	1 1/8	9	4 … 20	150	203
1 1/4	1 3/8	11 1/4	5 … 25	200	271

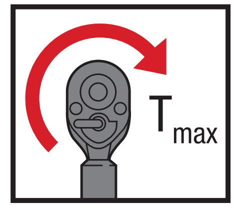
d_f[inch]	HAS	3/8	1/2	5/8	3/4	7/8	1	1 1/4
d_{f1}		1/2	5/8	13/16*	15/16*	1 1/8*	1 1/4*	1 1/2*
d_{f2}		7/16	9/16	11/16	13/16	15/16	1 1/8	1 3/8

* 

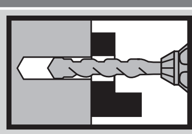
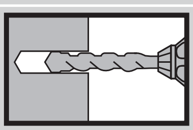
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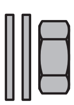
HIT-V





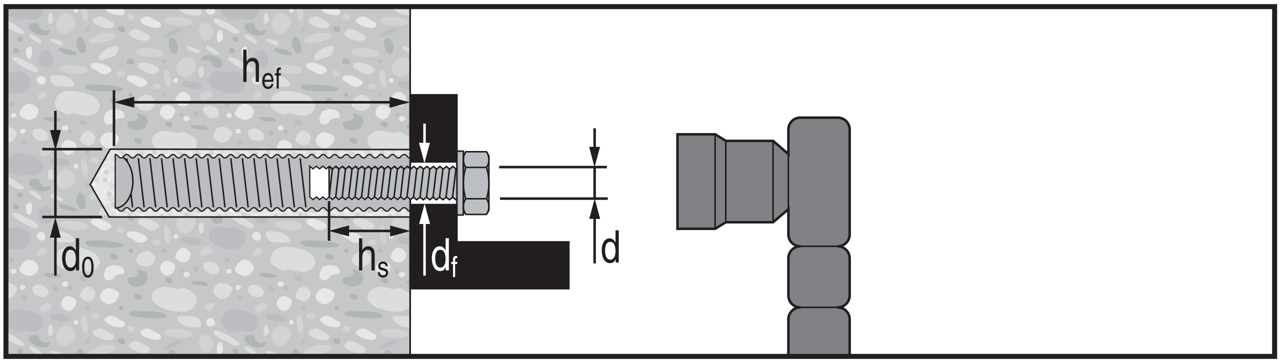
 Ø d [mm]	Ø d_0 [mm]	$h_{ef\ std}$ [mm]	h_{ef} [mm]	T_{max} [Nm]
M8	10	80	60…160	10
M10	12	90	60…200	20
M12	14	110	70…240	40
M16	18	125	80…320	80
M20	22	170	90…400	150
M24	28	210	96…480	200
M27	30	240	108…540	270
M30	35	270	120…600	300

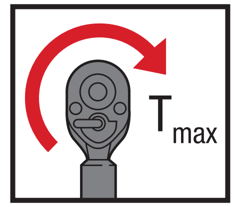
d_f [mm]	HIT-V	M8	M10	M12	M16	M20	M24	M27	M30
d_{f1}		11	14	16	20*	24*	30*	32*	37*
d_{f2}		9	12	14	18	22	26	30	33

* 

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HIS-N, -RN



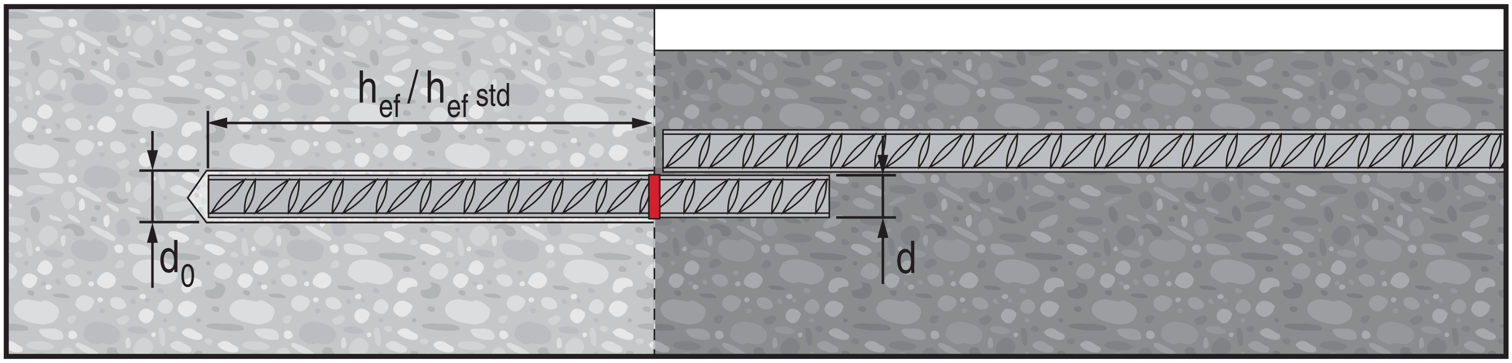


Ø d [inch]	Ø d_0 [inch]	h_{ef} [inch]	Ø d_f [inch]	h_s [inch]	T_{max} [ft-lb]	T_{max} [Nm]
3/8	11/16	4 3/8	7/16	3/8…15/16	15	20
1/2	7/8	5	9/16	1/2…1 3/16	30	41
5/8	1 1/8	6 3/4	11/16	5/8…1 1/2	60	81
3/4	1 1/4	8 1/8	13/16	3/4…1 7/8	100	136

Ø d [mm]	Ø d_0 [mm]	h_{ef} [mm]	Ø d_f [mm]	h_s [mm]	T_{max} [Nm]
M8	14	90	9	8…20	10
M10	18	110	12	10…25	20
M12	22	125	14	12…30	40
M16	28	170	18	16…40	80
M20	32	205	22	20…50	150

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Rebar



US Rebar

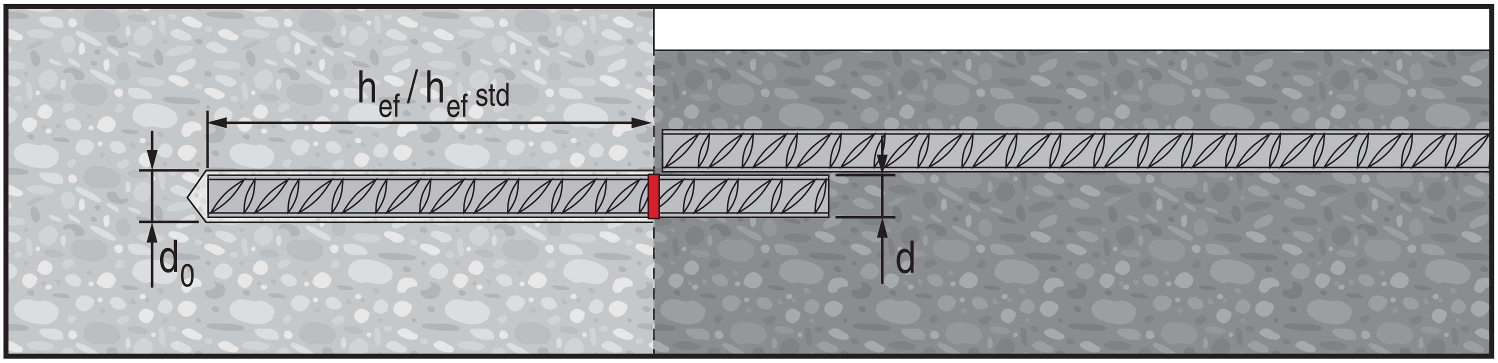
d	Ø d_0 [inch]	$h_{ef\ std}$ [inch]	h_{ef} [inch]
# 3	1/2	3 3/8	2 3/8…7 1/2
# 4	5/8	4 1/2	2 3/4…10
# 5	3/4	5 5/8	3 1/8…12 1/2
# 6	7/8	6 3/4	3 1/2…15
# 7	1	7 7/8	3 1/2…17 1/2
# 8	1 1/8	9	4…20
# 9	1 3/8	10 1/8	4 1/2…22 1/2
# 10	1 1/2	11 1/4	5…25

CA Rebar

d	Ø d_0 [inch]	$h_{ef\ std}$ [mm]	h_{ef} [mm]
10 M	9/16	115	70…226
15 M	3/4	145	80…320
20 M	1	200	90…390
25 M	1 1/4	230	101…504
30 M	1 1/2	260	120…598

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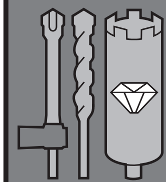
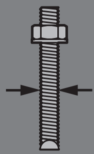
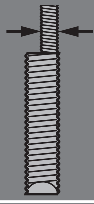
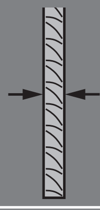
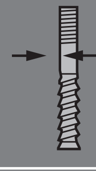
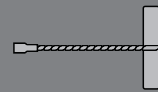
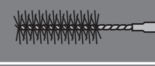
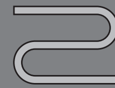
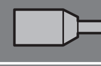
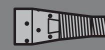
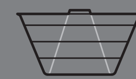
Rebar



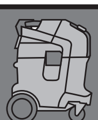
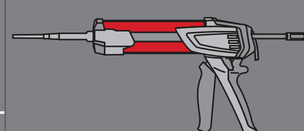
EU Rebar

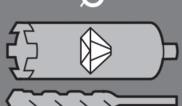
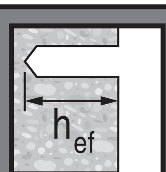
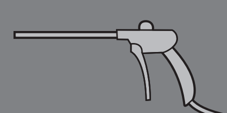
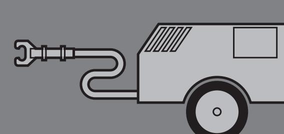
Ø d [mm]	Ø d_0 [mm]	$h_{ef\ std}$ [mm]	h_{ef} [mm]
8	12	80	60…160
10	14	90	60…200
12	16	110	70…240
14	18	125	75…280
16	20	125	80…320
18	22	150	85…360
20	25	170	90…400
22	28	190	95…440
24	32	210	96…480
25	32	210	100…500
26	35	210	104…520
28	35	270	112…560
30	37	270	120…600
32	40	300	128…640

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Ø 	HAS 	HIS-N 	Rebar 	HIT-Z 	 HIT-RB 	 HIT-SZ 	HIT-DL 	HIT-OHC 
d_0 [inch]	d [inch]				[inch]	[inch]	[inch]	Art. No.
7/16	3/8	–	–	3/8	7/16	–	–	387551
1/2	–	–	#3	–	1/2	1/2	1/2	
9/16	1/2	–	10M	1/2	9/16	9/16	9/16	
5/8	–	–	#4	–	5/8	5/8	9/16	
11/16	–	3/8	–	–	11/16	11/16	11/16	
3/4	5/8	–	15M #5	5/8	3/4	3/4	3/4	
7/8	3/4	1/2	#6	3/4	7/8	7/8	7/8	387552
1	7/8	–	20M #7	–	1	1	1	
1 1/8	1	5/8	#8	–	1 1/8	1 1/8	1	
1 1/4	–	3/4	25M	–	1 1/4	1 1/4	1	
1 3/8	1 1/4	–	#9	–	1 3/8	1 3/8	1 3/8	
1 1/2	–	–	30M #10	–	1 1/2	1 1/2	1 3/8	

HIT-DL: h_{ef} > 10”

	HIT-RE-M 		HIT-OHW 
	Art. No.		Art. No.
Hilti VC	337111	HDM 330 HDM 500 HDE 500-A18	387550

Ø 			
d_0 [inch]	[inch]	Art. No. 381215	
7/16”...1 1/8”	2 3/8”... 20”	✔	≥ 6 bar/90 psi
1 1/4”...1 1/2”	4”... 25”	–	≥ 140 m³/h / ≥ 82 CFM

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Ø	HIT-V	HIS-N	Rebar	HIT-Z	HIT-RB	HIT-SZ	HIT-DL	HIT-OHC
d_0 [mm]	d [mm]				[mm]	[mm]		Art. No.
10	8	–	–	8	10	–	–	387551
12	10	–	8	10	12	12	12	
14	12	8	10	12	14	14	14	
16	–	–	12	–	16	16	16	
18	16	10	14	16	18	18	18	
20	–	–	16	–	20	20	20	
22	20	12	18	20	22	22	20	387552
25	–	–	20	–	25	25	25	
28	24	16	22	–	28	28	25	
30	27	–	–	–	30	30	25	
32	–	20	24/25	–	32	32	32	
35	30	–	26/28	–	35	35	32	
37	–	–	30	–	37	37	32	
40	–	–	32	–	40	40	32	

HIT-DL: h_{ef} > 250 mm

	HIT-RE-M		HIT-OHW
	Art. No.		Art. No.
Hilti VC	337111	HDM 330 / 500 HDE 500-A18	387550

Ø	h_{ef}		
d_0 [mm]	[mm]	Art. No. 381215	
10...32	60...500	✔	≥ 6 bar/90 psi
35...40	100...640	–	≥ 140 m³/h

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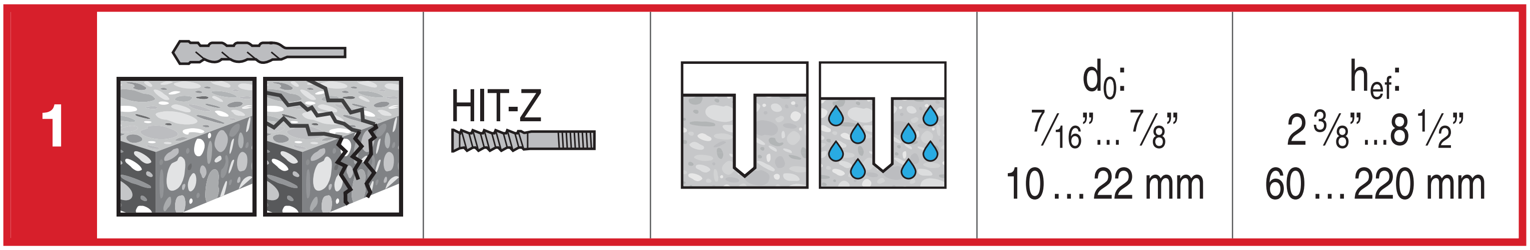
HIT-HY 200-A

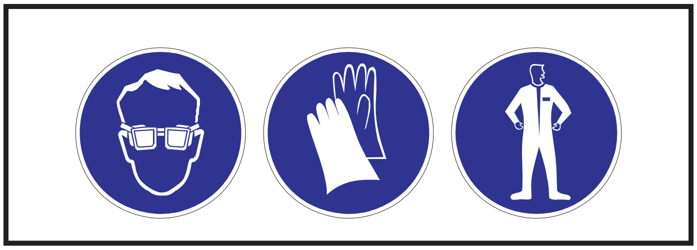
[°C]	[°F]	HIT-V, HAS / HIS-N / Rebar t_{work}	HIT-V, HAS / HIS-N / Rebar t_{cure}	HIT-Z t_{work}	HIT-Z t_{cure}
-10…-5	14…23	1,5 h	7 h	–	–
-4…0	24…32	50 min	4 h	–	–
1…5	33…41	25 min	2 h	–	–
6…10	42…50	15 min	1 h	15 min	1 h
11…20	51…68	7 min	30 min	7 min	30 min
21…30	69…86	4 min	30 min	4 min	30 min
31…40	87…104	3 min	30 min	3 min	30 min

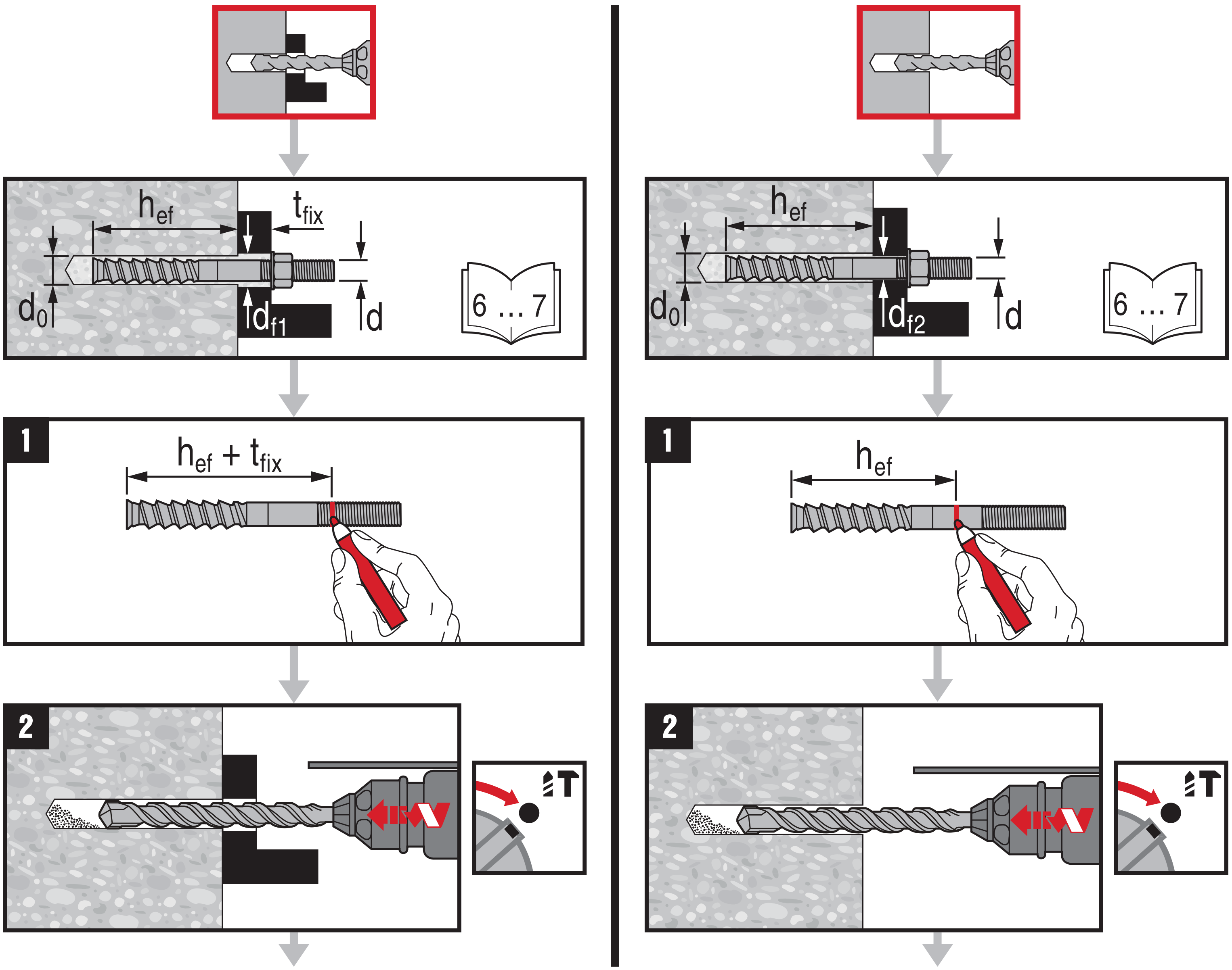
HIT-HY 200-R

[°C]	[°F]	HIT-V, HAS / HIS-N / Rebar t_{work}	HIT-V, HAS / HIS-N / Rebar t_{cure}	HIT-Z t_{work}	HIT-Z t_{cure}
-10…-5	14…23	3 h	20 h	–	–
-4…0	24…32	2 h	7 h	–	–
1…5	33…41	1 h	3 h	–	–
6…10	42…50	40 min	2 h	40 min	2 h
11…20	51…68	15 min	1 h	15 min	1 h
21…30	69…86	9 min	1 h	9 min	1 h
31…40	87…104	6 min	1 h	6 min	1 h

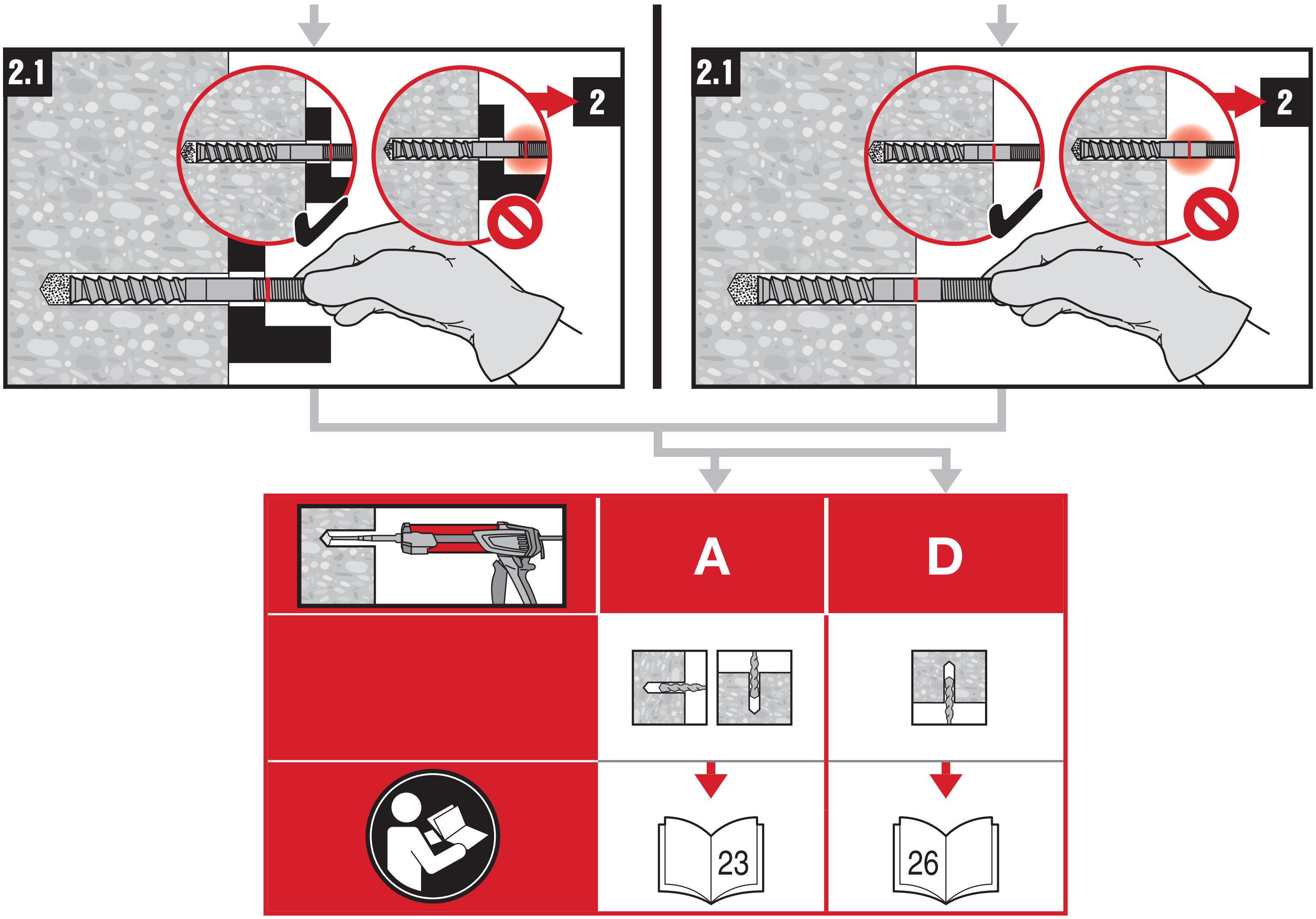
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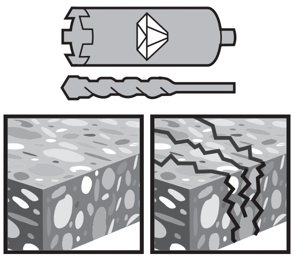
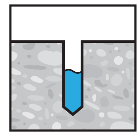


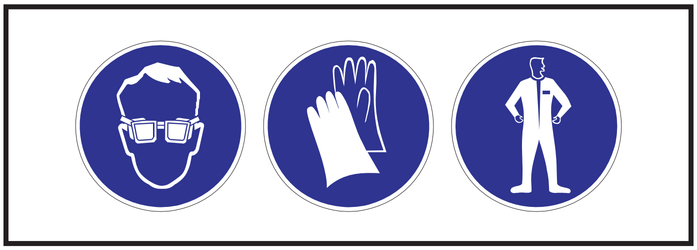


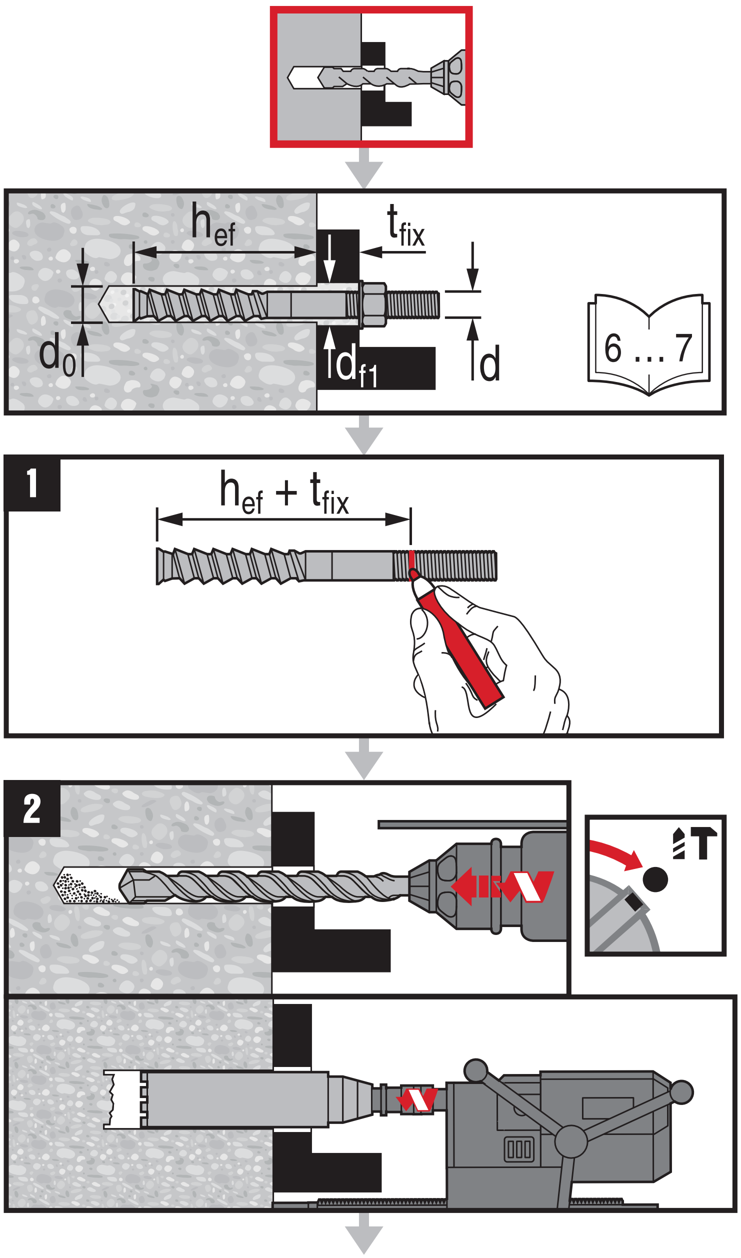
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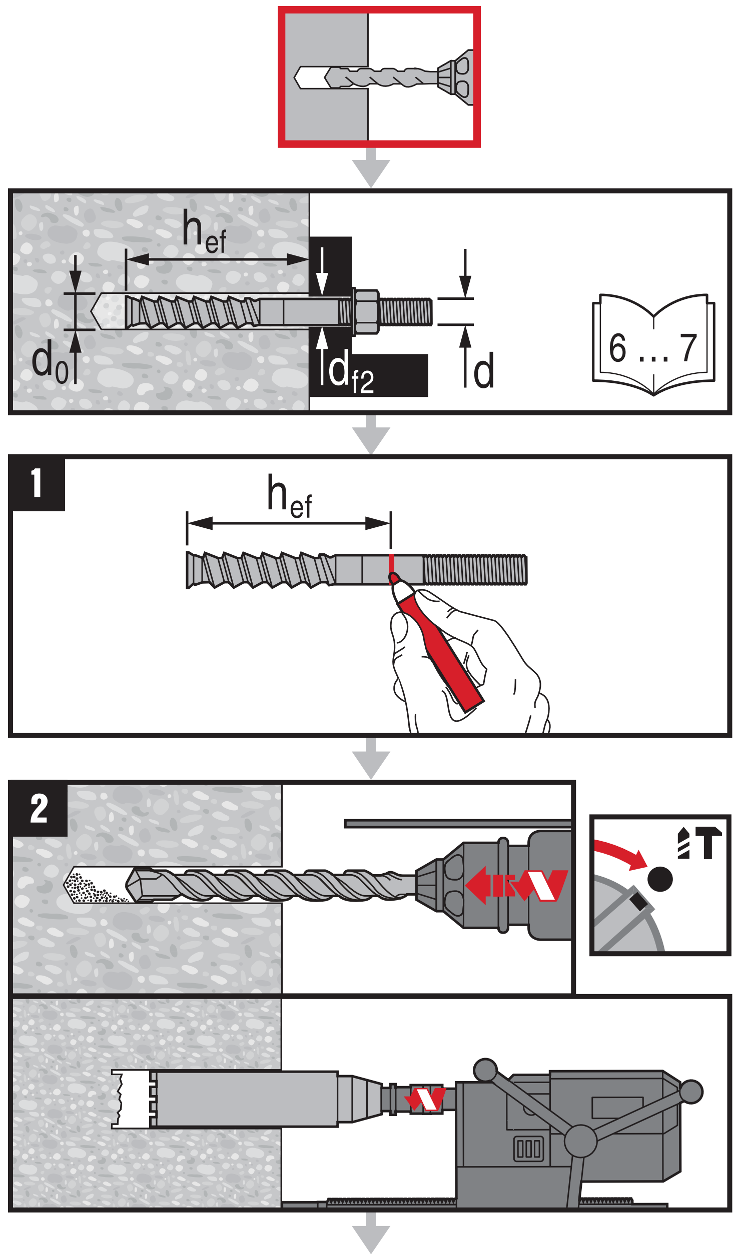

2.1
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2.1
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26

2

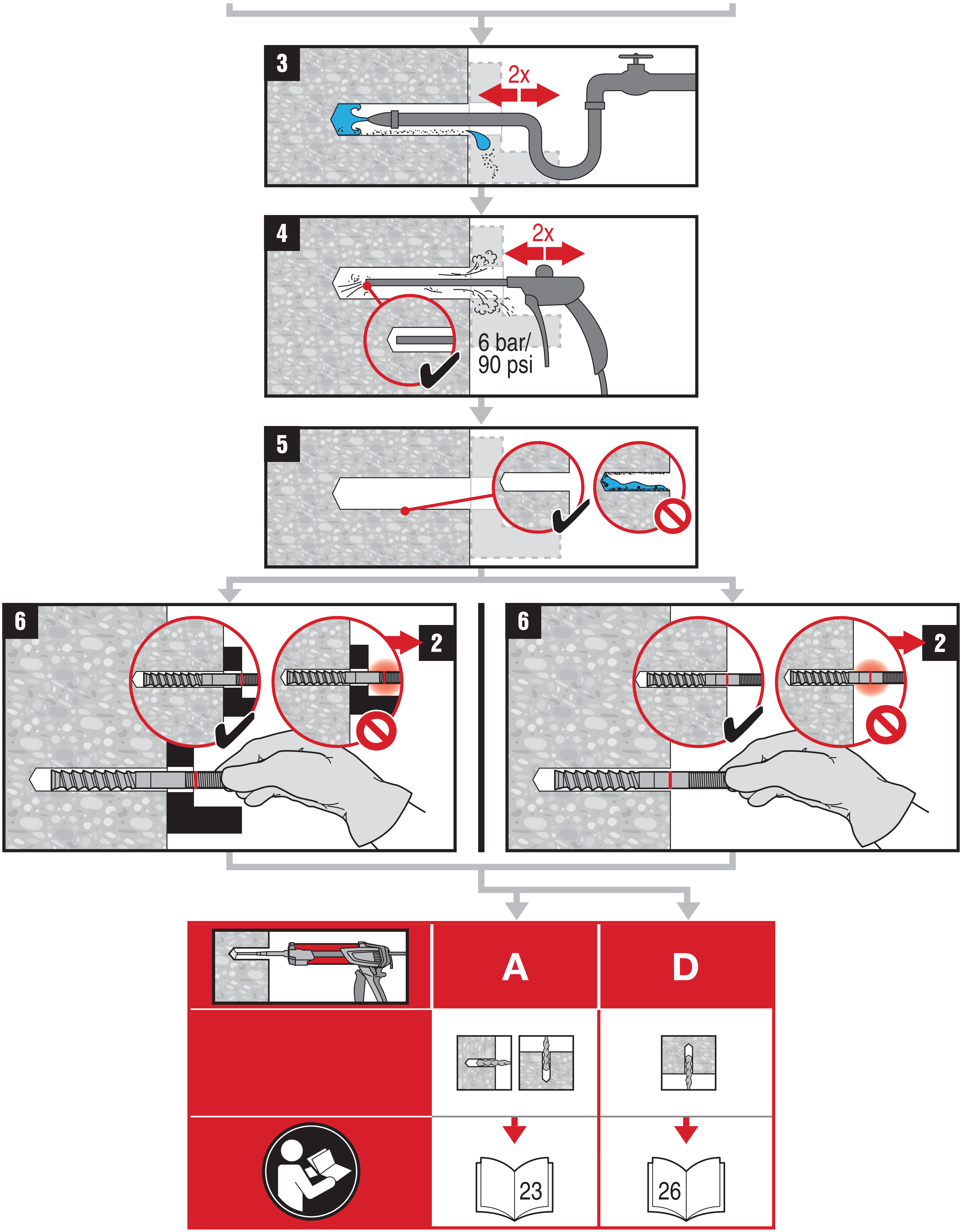
	HIT-Z 		d_0: 7/16"... 7/8" 10 … 22 mm	h_{ef}: 2 3/8"...8 1/2" 60 … 220 mm



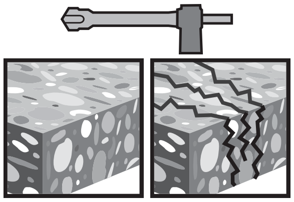
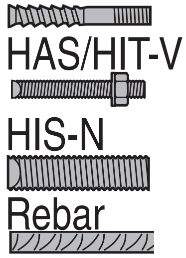
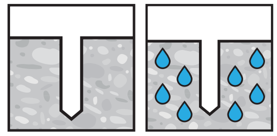


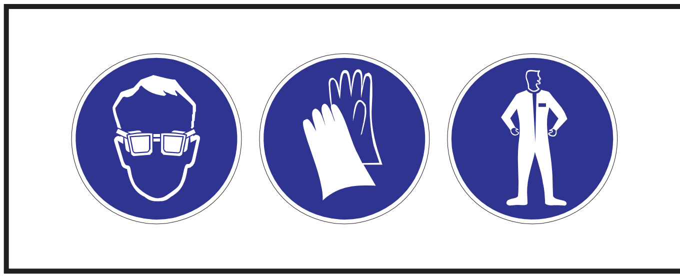


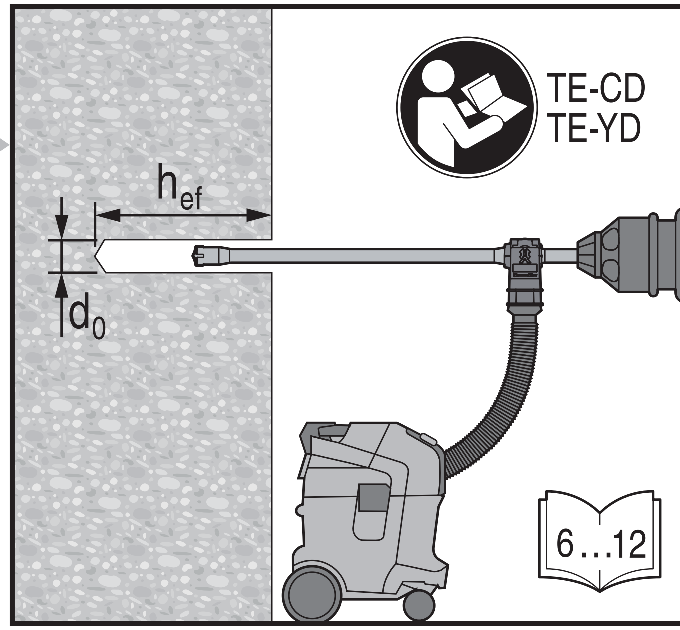
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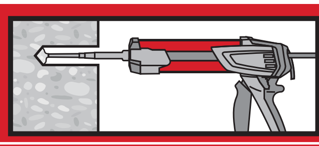
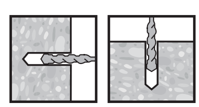
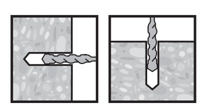
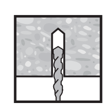
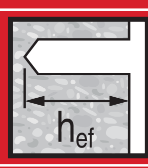


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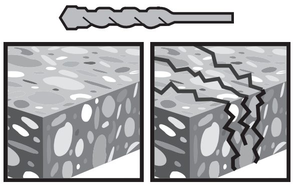
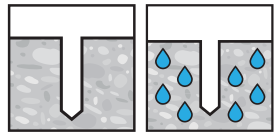
3					
3				d_0: ½"…1 ⅛" 12 … 32 mm	h_{ef}: 2 ⅜"…15 ¾" 60 … 400 mm

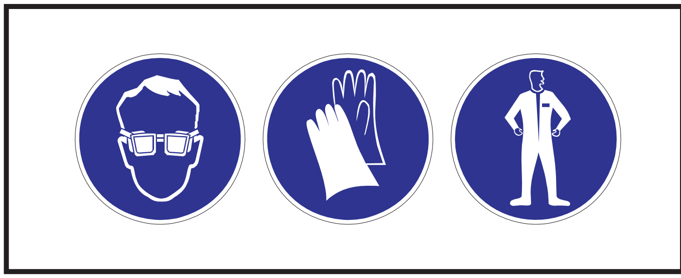


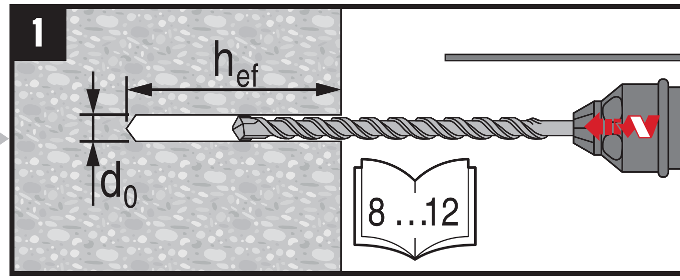


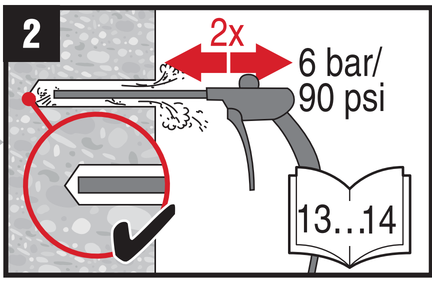
	**B**	**C**	**D**
			
	2 ⅜"...9 ⅞" 60…250 mm	2 ⅜"...15 ¾" 60…400 mm	2 ⅜"...15 ¾" 60…400 mm
	24	25	26

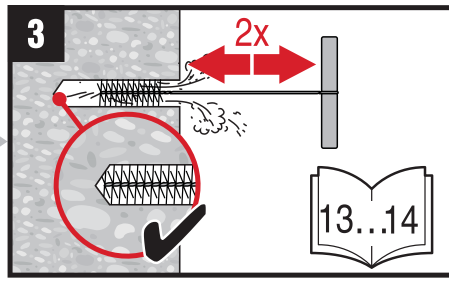
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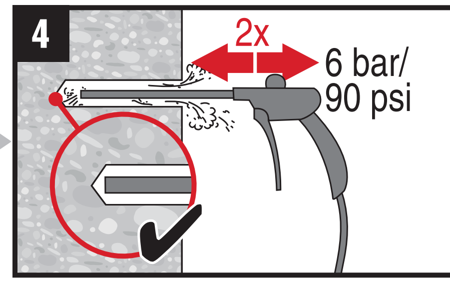
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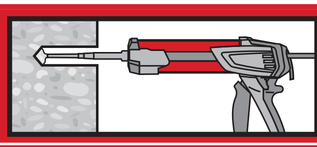
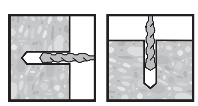
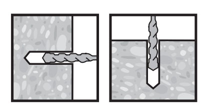
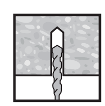
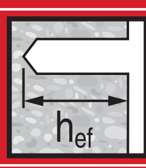


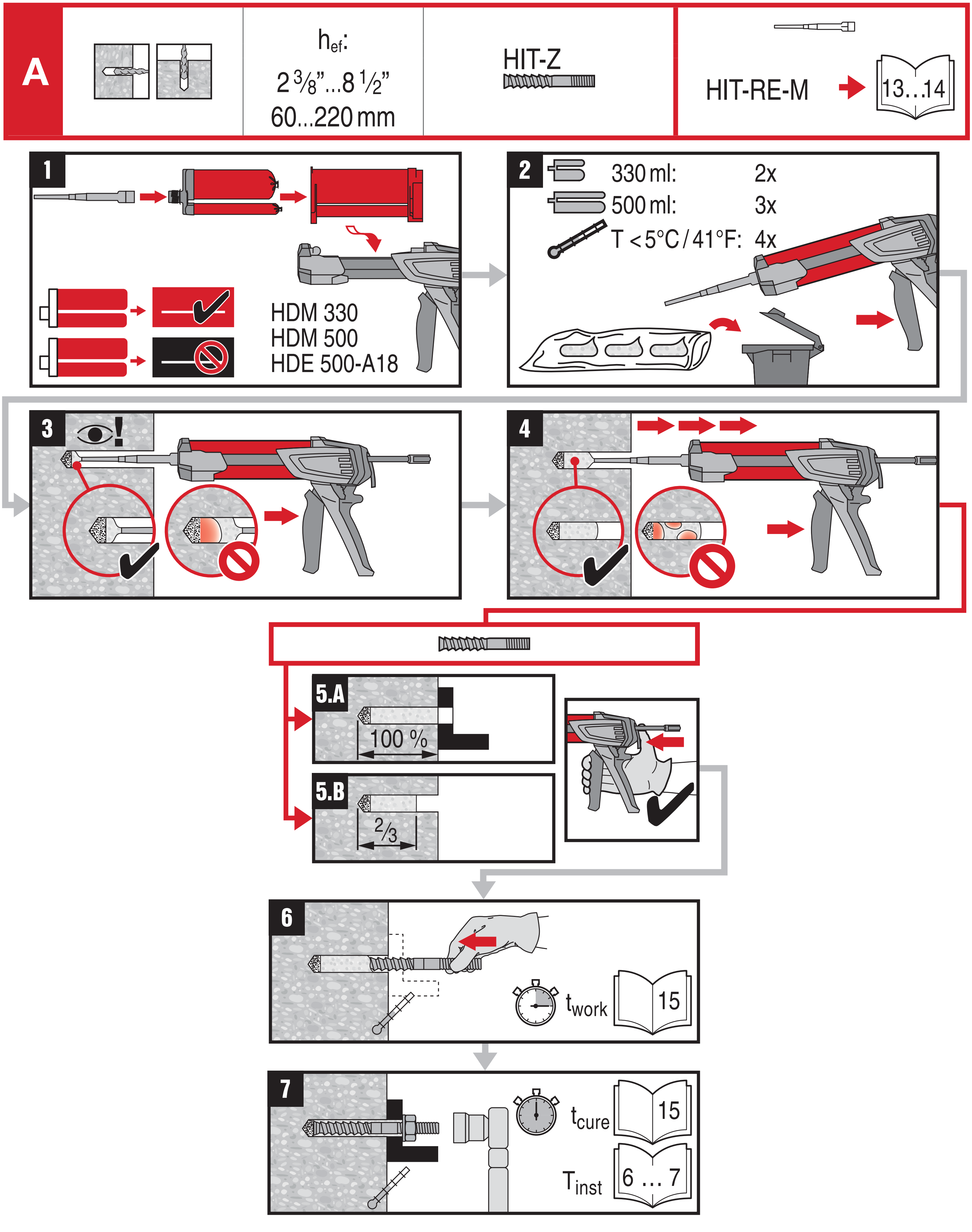




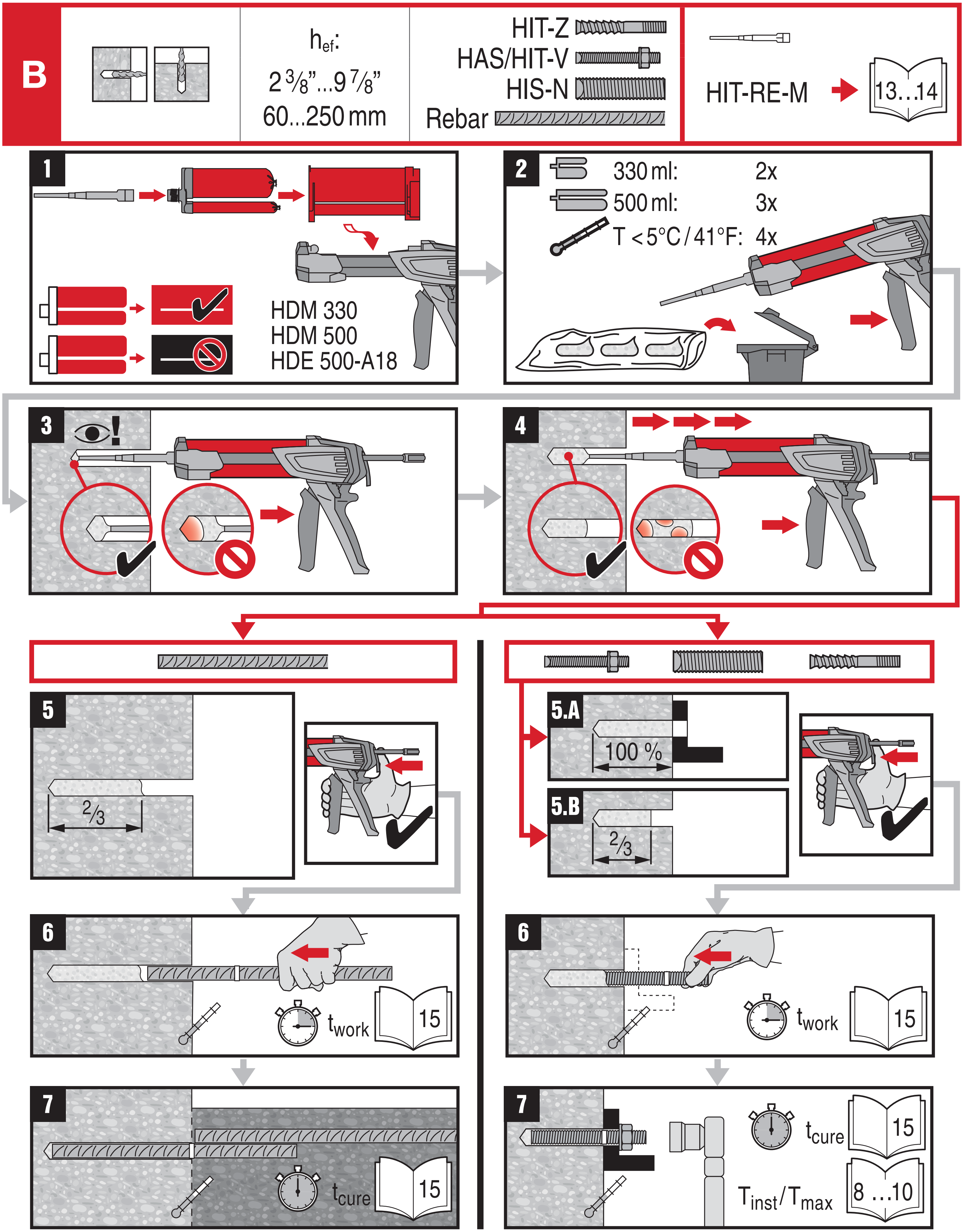




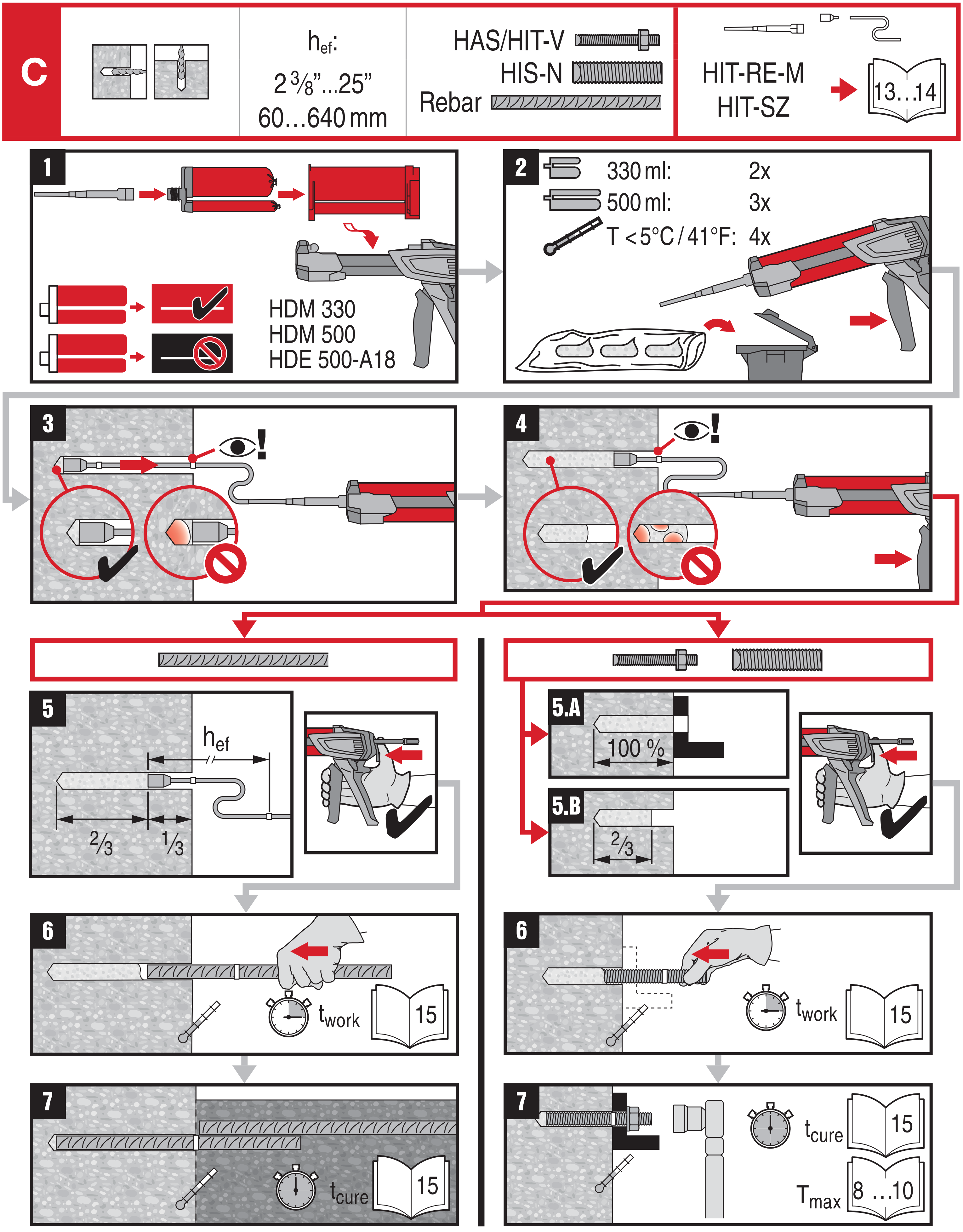
	**B**	**C**	**D**
			
	2 3/8"…9 7/8" 60…250 mm	2 3/8"…25" 60…640 mm	2 3/8"…25" 60…640 mm
	24	25	26



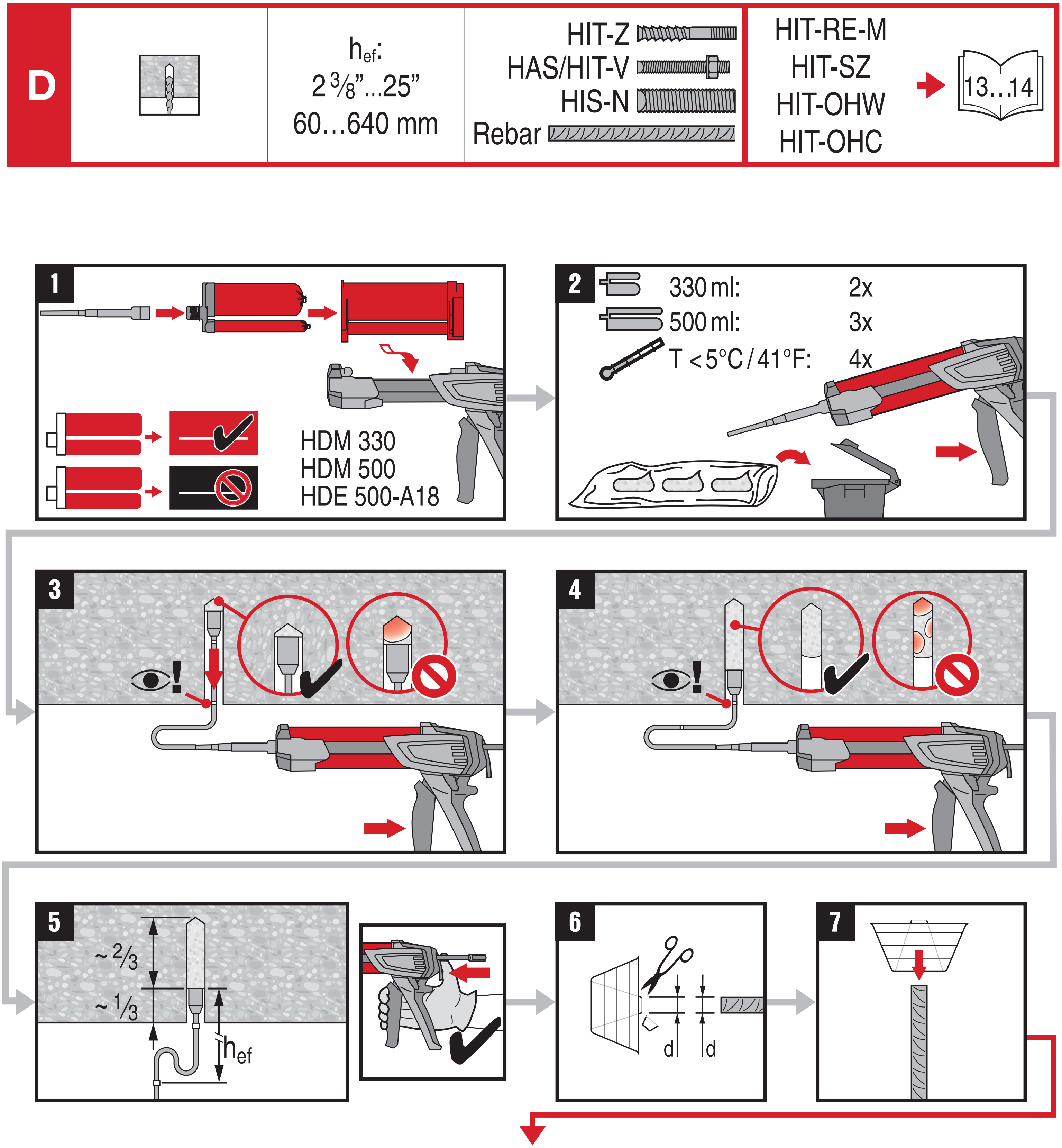
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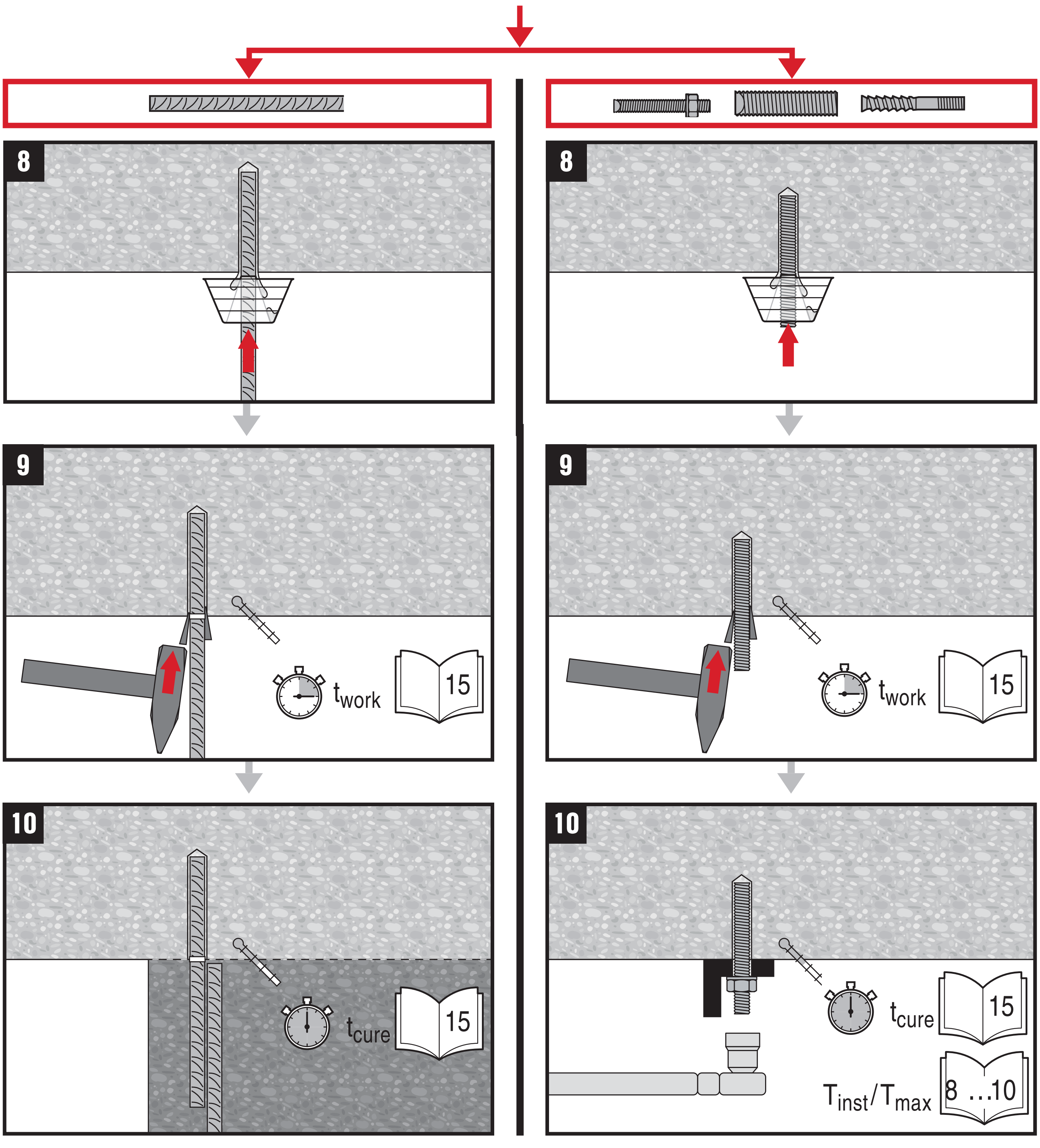
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8
8
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t_{work}
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t_{work}
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t_{cure}
15
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t_{cure}
15
T_{inst}/T_{max}
8 …10

Adhesive anchoring system for rebar and anchor fastenings in concrete.

Hilti HIT-HY 200-A

Contains: Dibenzoylperoxide, Hydroxypropylmethacrylate



Warning

H319	Causes serious eye irritation.
H317	May cause an allergic skin reaction.
P262	Do not get in eyes, on skin or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P337+313	If eye irritation persists: Get medical advice/attention.

Disposal considerations

Empty packs:

► Leave the mixer attached and dispose of via the local Green Dot recovery system ®

► or EAK waste material code: 150102 plastic packaging

Full or partially emptied packs:

► Must be disposed of as special waste in accordance with official regulations.
  - EAK waste material code: 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances.
  - or EAK waste material code: 20 01 27* paint, inks, adhesives and resins containing dangerous substances.

Content: 330 ml / 11.1 fl.oz. 500 ml / 16.9 fl. oz **Weight**: 590 g / 20.8 oz 890 g / 31.4 oz

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Product Information

- Always keep these instructions together with the product even when given to other persons.
- **Check expiration date:** See imprint on foil pack manifold (month/year). Do not use expired product.
- **Foil pack temperature during usage:** 0 °C to 40 °C / 32 °F to 104 °F.
- **Base material temperature at time of installation**:
  - **HAS/HIT-V, HIS, Rebar:** between -10 °C and 40 °C / 14 °F and 104 °F.
  - **HIT-Z:** between +5°C and 40°C / 41°F and 104°F.
- **Conditions for transport and storage**: Keep in a cool, dry and dark place between 5 °C and 25 °C / 41 °F and 77 °F.
- For any application not covered by this document / beyond values specified, please contact Hilti.
- **Partly used foil packs must remain in the cassette** and has to be used within 4 weeks. Leave the mixer attached on the foil pack manifold and **store within the cassette** under the recommended storage conditions. If reused, attach a new mixer and discard the initial quantity of anchor adhesive.

⚠ WARNING

! **The surface of the HIT-Z anchor rod must not be altered in any way.**

! **Improper handling may cause mortar splashes.**
- Always wear safety glasses, gloves and protective clothes during installation.
- Never start dispensing without a mixer properly screwed on.
- Attach a new mixer prior to dispensing a new foil pack (ensure snug fit).
- Use only the type of mixer (HIT-RE-M) supplied with the adhesive. Do not modify the mixer in any way.
- Never use damaged foil packs and/or damaged or unclean foil pack holders (cassettes).

! **Poor load values / potential failure of fastening points due to inadequate borehole cleaning.**
- The boreholes must be free of debris, dust, water, ice, oil, grease and other contaminants prior to adhesive injection.
- For blowing out the borehole – blow out with oil free air until return air stream is free of noticeable dust.
- For flushing the borehole – flush with water line pressure until water runs clear.
- For brushing the borehole – only use specified wire brush. The brush must resist insertion into the borehole – if not the brush is too small and must be replaced.

! **Ensure that boreholes are filled from the back of the borehole without forming air voids.**
- If necessary use the accessories / extensions to reach the back of the borehole.
- For overhead applications use the overhead accessories HIT-SZ and take special care when inserting the fastening element. Excess adhesive may be forced out of the borehole. Make sure that no mortar drips onto the installer.

! **Not adhering to these setting instructions can result in failure of fastening points!**

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Mortier de scellement pour ancrage de chevilles et d'armatures dans le béton.

Hilti HIT-HY 200-A

Contient : peroxyde de dibenzoyle, hydroxypropylmethacrylate



Attention

H319	Provoque une sévère irritation des yeux.
H317	Peut provoquer une allergie cutanée.
P262	Éviter tout contact avec les yeux, la peau ou les vêtements.
P280	Porter des gants de protection/des vêtements de protection/un équipement de protection des yeux/du visage.
P302 + P352	EN CAS DE CONTACT AVEC LA PEAU : Laver abondamment à l'eau et au savon.
P305 + P351 + P338	EN CAS DE CONTACT AVEC LES YEUX : Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.
P333+313	En cas d'irritation ou d'éruption cutanée : consulter un médecin.
P337+313	Si l'irritation oculaire persiste : consulter un médecin.

Indications de recyclage

Emballages vides :

► Laisser la buse mélangeuse vissée et procéder à l'élimination par le biais du système de collecte national "Point Vert".®

► ou code déchets EAK : 150102 Emballages en plastique

Emballages pleins ou à moitié vides :

► Les apporter à un centre de collecte des matières dangereuses conformément aux dispositions administratives.
- Code déchets EAK : 08 04 09* Résidus de colles et composants pour joints, contenant des solvants organiques ou d'autres substances dangereuses.
- ou code déchets EAK : 20 01 27* Peintures, encres d'impression, colles et résines artificielles, contenant des substances dangereuses.

Contenu : 330 ml / 11.1 fl.oz. 500 ml / 16.9 fl. oz **Poids :** 590 g / 20.8 oz 890 g / 31.4 oz

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Information produit

- Le présent mode d'emploi doit toujours être conservé avec le produit, même s'il est confié à une autre personne.
- Avant toute utilisation, prendre connaissance de la **fiche de données de sécurité**.
- Contrôler la **date de péremption** (mois/année) imprimée sur le raccord de la cartouche. Ne plus utiliser le produit lorsque la date de péremption est dépassée.
- **Température des cartouches souples en cours d'utilisation :** entre 0 °C et 40 °C / 32 °F et 104 °F.
- **Température du matériau support en cours d'utilisation :**
  HAS/HIT-V, HIS, Rebar : entre –10 °C et 40 °C / 14 °F et 104 °F.
  HIT-Z : entre +5 °C et 40 °C / 41 °F et 104 °F.
- **Conditions de transport et de stockage :** dans un endroit frais, sec et à l'abri de la lumière à une température de +5 °C à 25 °C / 41 °F à 77 °F.
- En cas d'applications qui ne sont pas décrites dans le présent mode d'emploi ou hors plage de valeurs spécifiées, s'adresser à Hilti.
- **Les cartouches souples entamées doivent rester dans le porte-cartouches** et être réutilisées dans les quatre semaines. Laisser la buse mélangeuse vissée et stocker la cartouche souple **dans le porte-cartouches** conformément à la réglementation. Avant réutilisation, visser une nouvelle buse mélangeuse et jeter le mortier extrudé lors des premières pressions.

fr

AVERTISSEMENT

! **La surface de la tige d‘ancrage HIT-Z ne doit pas être modifiée.**

! **En cas de maniement non conforme, il y a risque de projection du mortier.**
- Lors du travail, porter une protection des yeux, des gants et des vêtements de protection!
- Ne jamais commencer l'extrusion si la buse mélangeuse n'est pas vissée!
- Avant de commencer l'extrusion d'une nouvelle cartouche souple, visser une nouvelle buse mélangeuse. Vérifier qu'elle est bien en place.
- Utiliser exclusivement le type de buse fourni avec le mortier (HIT-RE-M). Ne modifier la buse mélangeuse en aucun cas.
- Ne jamais utiliser de cartouches souples endommagées ni de porte-cartouches endommagés ou très encrassés.

! **Mauvaise fixation/défaillance du chevillage à cause d'un nettoyage insuffisant du trou.**
- Avant de procéder à l'injection, s'assurer que le trou de perçage est exempt de déblais de perçage, poussières, eau, glace, huile, graisse ou autres contaminants.
- Soufflage du trou foré – avec de l'air exempt d'huile jusqu'à ce que l'air sortant soit exempt de toute poussière.
- Rinçage du trou foré – rincer le trou à l'eau à pression de conduite normale jusqu'à ce que de l'eau propre ressorte.
- Brossage du trou foré – uniquement avec un écouvillon en acier adapté. Une résistance doit se faire sentir lors de l'insertion de l'écouvillon dans le trou – si ce n'est pas le cas, l'écouvillon est trop petit et doit être remplacé.

! **Veiller à ce que le remplissage se fasse à partir du fond du trou pour éviter la formation de bulles d'air.**
- Si nécessaire, utiliser des prolongateurs pour atteindre le fond du trou.
- En cas d'applications au plafond, utiliser l'accessoire HIT-SZ et faire particulièrement attention lors de l'introduction de l'élément de fixation. L'excédent de mortier peut ressortir du trou foré. Veiller alors à ce que celui-ci ne goutte pas sur l'opérateur.

! **Le non-respect des instructions peut entraîner une défaillance du chevillage!**

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Resina de inyección para la fijación de anclajes y tacos en hormigón.

Hilti HIT-HY 200-A

Contiene: peróxido de dibenzoilo, metacrilato de hidroxipropilo



Atención

H319	Provoca irritación ocular grave.
H317	Puede provocar una reacción alérgica en la piel.
P262	Evitar el contacto con los ojos, la piel o la ropa.
P280	Llevar guantes/prendas/gafas/máscara de protección.
P302 + P352	EN CASO DE CONTACTO CON LA PIEL: lavar con agua y jabón abundantes.
P305 + P351 + P338	EN CASO DE CONTACTO CON LOS OJOS: aclarar cuidadosamente con agua durante varios minutos. Quitar las lentes de contacto, si lleva y resulta fácil. Seguir aclarando.
P333+313	En caso de irritación o erupción cutánea: consultar a un médico.
P337+313	Si persiste la irritación ocular: consultar a un médico.

Indicaciones de reciclaje

Cartuchos vacíos:

► Deseche el mezclador enroscado a través del sistema de recogida nacional identificado como Punto Verde.®

► O el código de residuo LER: 150102 embalajes de plástico

Cartuchos llenos o parcialmente vacíos:

► Deberán eliminarse como residuos especiales de acuerdo con las normativas oficiales.
- Código de residuo LER: 08 04 09* Residuos de adhesivos y sellantes que contienen disolventes orgánicos u otras sustancias peligrosas.
- O el código de residuo LER: 20 01 27* Pinturas, tintas, adhesivos y resinas que contienen sustancias peligrosas.

Contenido: 330 ml / 11.1 fl.oz. 500 ml / 16.9 fl. oz **Peso:** 590 g / 20.8 oz 890 g / 31.4 oz

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Información del producto

- Conserve las presentes instrucciones de uso siempre junto con el producto y entréguelas también si el producto pasa a manos de otra persona.
- Consulte la **hoja de datos de seguridad** antes de utilizar el producto.
- **La fecha de caducidad** se indica en la pieza de conexión (mes/año). El producto no debe utilizarse después de la fecha de caducidad.
- **Temperatura del cartucho durante la utilización:** de 0 °C a 40 °C / de 32 °F a 104 °F.
- **Temperatura del material base durante la instalación:**
  - **Varilla HAS/HIT-V, manguito HIS, barra corrugada:** de –10 °C a 40 °C / de 14 °F a 104 °F.
  - **HIT-Z:** de +5 °C a 40 °C / de 41 °F a 104 °F.
- **Condiciones de transporte y almacenamiento:** lugar fresco, seco y oscuro con una temperatura de +5 °C a 25 °C / de 41 °F a 77 °F.
- Para aplicaciones que no se describen en las presentes instrucciones de uso o no se enmarcan en la especificación, póngase en contacto con Hilti.
- **Los cartuchos que no estén completamente vacíos deberán permanecer en el portacartuchos** y utilizarse antes de cuatro semanas. Para ello deberán guardarse **en el portacartuchos** con el mezclador enroscado en las condiciones de almacenamiento recomendadas. Antes de utilizarlo de nuevo, enroscar un nuevo mezclador y desechar la resina inicial.

⚠ **ADVERTENCIA**

! **La superficie de la barra de anclaje HIT-Z no debe modificarse.**

! **La resina puede salpicar si se utiliza incorrectamente.**
- Lleve gafas protectoras, guantes de protección y ropa de trabajo durante el trabajo.
- No comience a inyectar si no se ha roscado el mezclador.
- Enrosque un nuevo mezclador antes de trabajar con un cartucho nuevo. Asegúrese de que el mezclador está unido firmemente.
- Utilice exclusivamente el modelo de mezclador (HIT-RE-M) suministrado con la resina. No modifique el mezclador en ningún caso.
- No utilice cartuchos en mal estado y/o portacartuchos dañados o sucios.

! **Valores de sujeción deficientes/fallo de la fijación debido a limpieza insuficiente del agujero.**
- Antes de inyectar la resina, los agujeros deben estar libres de restos de perforación, polvo, agua, hielo, aceite, grasa o cualquier otro agente contaminante.
- Soplado del agujero con aire sin aceite hasta que el aire que refluye esté libre de polvo.
- Lavado del agujero: lave con una manguera de agua con la presión normal de la red hasta que salga agua limpia.
- Limpieza del agujero: realícese sólo con un cepillo metálico de tamaño apropiado. Al cepillar el agujero, se notará cierta resistencia en el cepillo. Si no es este el caso, el cepillo es demasiado pequeño y debe cambiarse.

! **Verificar que el relleno del agujero se produce desde el fondo del mismo para que no se formen burbujas de aire.**
- Si es necesario, utilice las prolongaciones para alcanzar el fondo del agujero..
- En aplicaciones por encima de la cabeza, utilice el accesorio HIT-SZ y preste especial atención al introducir el elemento de fijación. Puede salir resina sobrante del agujero. Asegúrese de que la resina no gotee sobre el usuario.

! **El incumplimiento de estas instrucciones puede llevar a una fijación incorrecta.**

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Buchas químicas para fixações de ferros e de ancoragens em betão.

Hilti HIT-HY 200-A

Contém: peróxido de dibenzoílo, metacrilato de hidroxipropilo



Atenção

H319	Provoca irritação ocular grave.
H317	Pode provocar uma reacção alérgica cutânea.
P262	Não pode entrar em contacto com os olhos, a pele ou a roupa.
P280	Usar luvas de protecção/vestuário de protecção/protecção ocular/ protecção facial.
P302 + P352	SE ENTRAR EM CONTACTO COM A PELE: lavar com sabonete e água abundantes.
P305 + P351 + P338	SE ENTRAR EM CONTACTO COM OS OLHOS: enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continuar a enxaguar.
P333+313	Em caso de irritação ou erupção cutânea: consulte um médico.
P337+313	Caso a irritação ocular persista: consulte um médico.

Recomendação sobre a eliminação

Cartuchos vazios:

► Deixar o misturador enroscado e eliminar através do sistema de recolha "Ponto Verde" nacional.

► ou código CER: 150102 Embalagens de plástico

Cartuchos semiusados ou novos:

► Eliminar de acordo com as normas e regulamentações legais sobre resíduos especiais.
- Código CER: 08 04 09* Resíduos de colas ou vedantes, contendo solventes orgânicos ou outras substâncias perigosas.
- ou código CER: 20 01 27* Tintas, produtos adesivos, colas e resinas, contendo substâncias perigosas.

Conteúdo: 330 ml / 11.1 fl.oz. 500 ml / 16.9 fl. oz **Peso:** 590 g / 20.8 oz 890 g / 31.4 oz

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Dados informativos sobre o produto

- Guarde estas instruções de utilização sempre junto com o produto, mesmo quando o entregar a outras pessoas.
- Antes de iniciar os trabalhos, tenha em consideração a **ficha técnica de segurança**.
- Veja o **prazo de validade** (mês/ano) na peça de junção. Não utilize produtos cujo prazo de validade se encontre ultrapassado.
- **Temperatura do cartucho durante a utilização:** entre 0 °C e 40 °C / 32 °F e 104 °F.
- **Temperatura do material base durante a instalação:**
  - **HAS/HIT-V, HIS, Rebar:** entre –10 °C e 40 °C / 14 °F e 104 °F.
  - **HIT-Z:** entre +5 °C e 40 °C / 41 °F e 104 °F.
- **Condições de transporte e armazenamento:** em lugar fresco, seco e ao abrigo da luz, entre +5 °C e 25 °C / 41 °F e 77 °F.
- Em caso de aplicações que não se encontrem descritas nas presentes instruções de utilização ou estejam fora das especificações, é favor dirigir-se à Hilti.
- **As sobras de cartuchos parcialmente usados devem permanecer no suporte** e ser utilizadas num prazo de quatro semanas. Deixe o misturador enroscado e armazene-o **no suporte** juntamente com o cartucho, de acordo com as condições de armazenagem preconizadas. Quando/se reutilizados, utilize um misturador novo e não utilize novamente a resina inicial.

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⚠ AVISO

! **A superfície do varão roscado HIT-Z não pode ser modificada.**

! **No caso de manuseamento incorrecto, é possível que seja injectada resina.**
- Durante a realização de trabalhos, use óculos de protecção, luvas de protecção e roupa de trabalho!
- Nunca comece a aplicação sem que o misturador esteja enroscado!
- Antes da aplicação de um novo cartucho, enrosque um misturador novo. Certifique-se de que está bem apertado.
- Utilizar apenas o tipo de misturador (HIT-RE-M) fornecido com a resina. Não modifique o misturador de forma alguma.
- Nunca utilize cartuchos danificados e/ou suportes danificados ou sujos.

! **Valores de retenção deficientes/falha da fixação devido a limpeza insuficiente do furo.**
- Antes da injecção, os furos têm de estar isentos de material de perfuração, pó, água, gelo, óleo, gordura ou outras impurezas.
- Limpar o furo por sopro com ar isento de óleo, até que o ar saia sem pó.
- Lavar o furo – com uma mangueira com pressão normal, até sair água limpa.
- Escovar o furo – apenas com uma escova de aço adequada. Ao escovar o furo deverá ser perceptível uma resistência na escova – se não for o caso, a escova é demasiado pequena e deverá ser substituída.

! **Assegure que o enchimento do furo é efectuado a partir do fundo, para que não se formem bolhas de ar.**
- Se necessário, utilize os prolongadores para alcançar o fundo do furo.
- No caso de aplicações em suspensão, utilize o acessório HIT-SZ e preste especial atenção ao inserir o elemento de fixação. Pode sair resina em excesso do furo. Certifique-se de que não pinga resina sobre o utilizador.

! **A não observação das instruções pode conduzir à falha da fixação!**

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